NWS FORM E-5 (11-88) (PRES. by NWS Instru	U.S. DEPARTMENT OF COMMERCE  NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION ction 10-924)  NATIONAL WEATHER SERVICE	HYDROLOGIC SERVICE AREA (HSA) WFO Jackson, Mississippi		
MONTHLY	REPORT OF HYDROLOGIC CONDITIONS	REPORT FOR:  MONTH YEAR  June 2014		
TO:	Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service 1325 East West Highway, Room 7230 Silver Spring, MD 20910-3283	SIGNATURE Alan E. Gerard, Meteorologist In-Charge		
		Date <b>7/23/2014</b>		

An X inside this box indicates that no river flooding occurred within this hydrologic service area.

# Synopsis...

The month of June was, in general, wetter than normal. The western two-thirds of the HSA (Hydrologic Service Area) received at least two inches of rainfall above normal, whereas the most eastern third of the HSA remained drier than normal. The Hattiesburg and Meridian ASOS's (Automated Surface Observing System) were 0.5 to 1.5 inches below normal rainfall. Greenwood measured its third wettest June on record with a little over nine inches of rainfall. Temperature-wise, the HSA measured near normal in respect to the average monthly temperature. Only the Hattiesburg and Greenville ASOS's averaged above one degree above normal values.

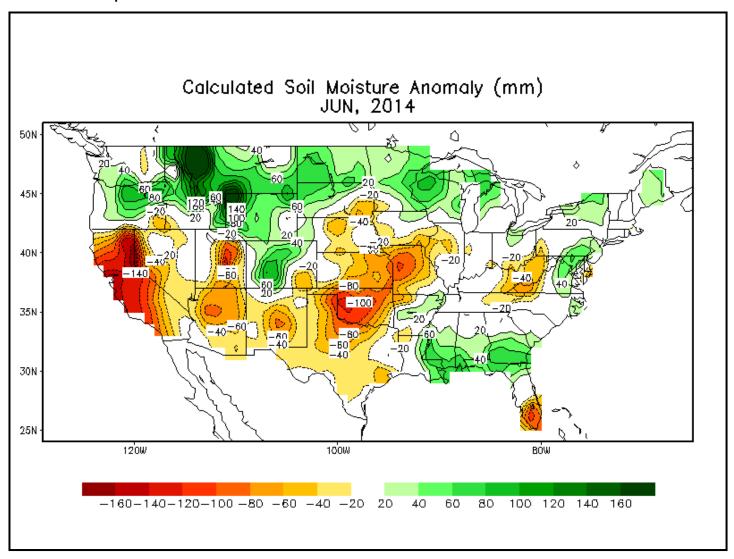
The month started out with the typical diurnal, summertime scattered showers and thunderstorms on the 1<sup>st</sup> through the 4<sup>th</sup>. A creeping frontal boundary then began approaching the HSA on the 5<sup>th</sup>, finally entered the area on the 7<sup>th</sup> and brought some dispersed rainfall to the northern half of Mississippi.

On the 9<sup>th</sup>, a warm front located in North Mississippi triggered the formation of some heavy thunderstorms which dropped more than three inches of rainfall in the northern part of the HSA. On the following two days, the accompanying cold front took its time to pass through the region and brought another three inches of rainfall to the entire HSA on the 10<sup>th</sup> and 11<sup>th</sup>. Another front passed through on the 13<sup>th</sup> and dropped some minor scattered rainfall throughout the area.

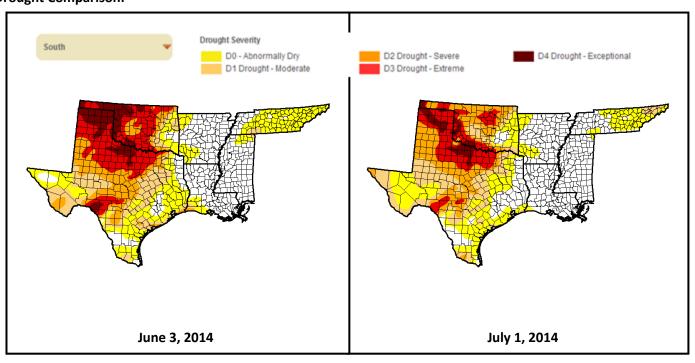
The summer pattern of diurnal scattered thunderstorms started again on the 14<sup>th</sup> and continued for the next two weeks through the 29<sup>th</sup>. The days with heavier rainfall included the 19<sup>th</sup>, 23<sup>rd</sup>, and 26<sup>th</sup>. On each of these days, a couple locations received 2.5 inches of rainfall or more. The pattern ended on the 29<sup>th</sup> and left the whole area dry on the last day of the month.

# **River and Soil Conditions...**

## **Soil Moisture Map:**

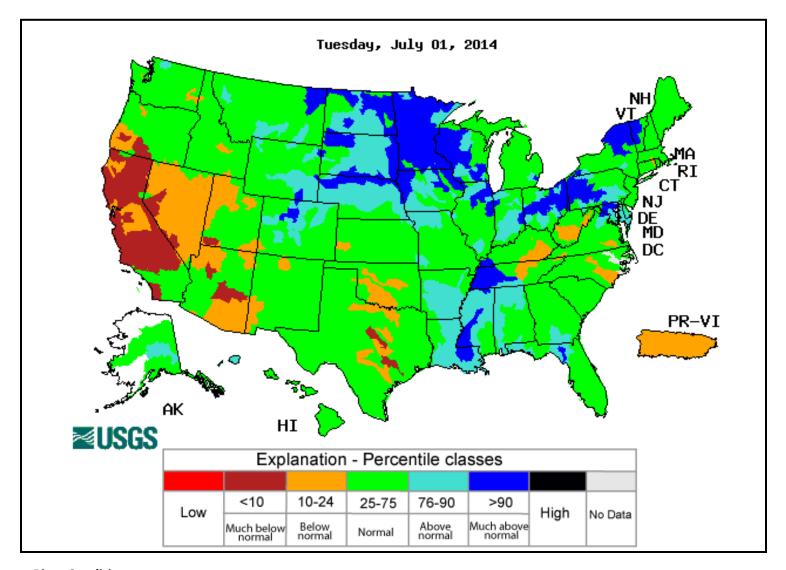


# **Drought Comparison:**



### Streamflow:

The United States Geological Survey's (USGS) June 2014 river streamflow records were compared with all historical June streamflow records. The June streamflow was above normal in the majority of the HSA and normal in the southeastern corner.



### **River Conditions:**

Minor flooding occurred along the upper Big Sunflower, upper Big Black, and Yalobusha rivers. No flooding occurred along any other river system in the HSA. For the conditions of the Mississippi River from Arkansas City to Natchez, refer to the hydrographs on the next page.

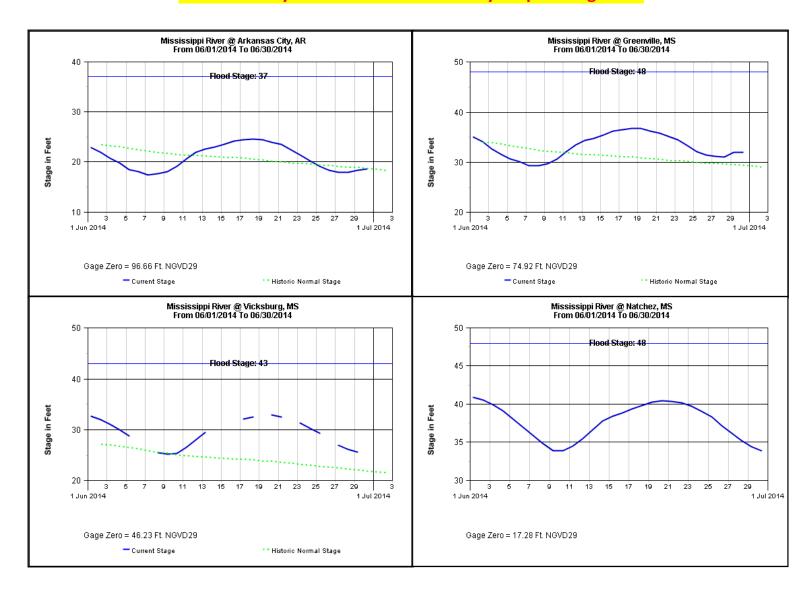
### **Climatic Outlook and Flood Potential:**

The climatic outlook favors above normal temperatures over the next three months for the entire HSA. For precipitation, the outlook shows equal chances for below or above normal rainfall over the next three months throughout the HSA. Therefore, based on current soil moisture, streamflow, and the 3-month weather outlook, the flood potentials are as follows:

Pearl River System: Average.
Yazoo River System: Average.
Big Black River System: Average.
Homochitto River System: Average.
Pascagoula River System: Average.
Northeast LA and Southeast AR: Average.
Tombigbee River System: Average.

Mississippi River: Average.

# Mississippi River Plots June 2014 Plots Courtesy of the United States Army Corps of Engineers



# **Monthly Preliminary High and Low Stages:**

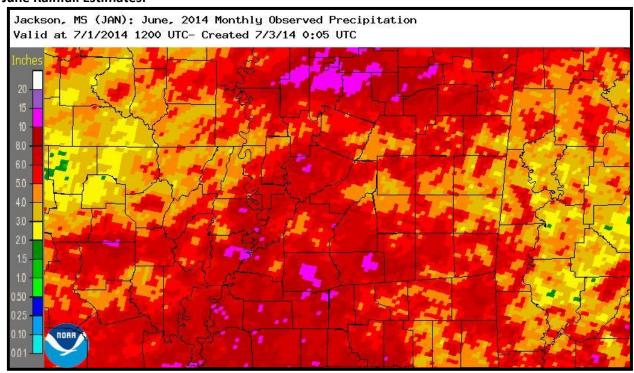
Location	Flood Stage (ft)	High Stage (ft)	Date	Low Stage (ft)	Date
Arkansas City	37	24.62	6/18	17.42	6/07
Greenville	48	36.80	6/18	29.31	6/08
Vicksburg	43	32.86	6/20	25.17	6/09
Natchez	48	40.92	6/01	33.91	6/10

# Rainfall for the Month of June:

The largest rainfall amounts in the HSA from NWS Cooperative Observer reports during the period from 7 am on May 31<sup>st</sup> until 7 am on June 30<sup>th</sup> were:

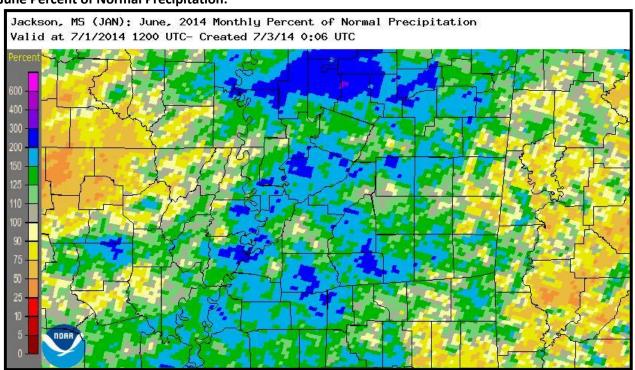
11.48 inches at Grenada, MS; 11.11 inches at Grenada Dam, MS; 10.96 inches at Crawford, MS; 10.16 inches at Hazlehurst, MS; 9.59 inches at Elliot, MS; 9.57 inches at Meadville, MS; 9.20 inches at Meadville 5SE, MS; 8.93 inches at D'lo, MS; 8.75 inches at Purvis, MS; 8.56 inches at Mize, MS; 8.35 inches at Bay Springs, MS; 8.27 inches at Monticello, MS; 8.26 inches at Winona, MS; 8.14 inches at Starkville, MS;

### June Rainfall Estimates:



Note: Observer rainfall and MPE may differ due to time differences.

### June Percent of Normal Precipitation:



Note: Observer rainfall and MPE may differ due to time differences.

### June Rainfall for Selected Cities:

City (Airport)	Rainfall	Departure from Normal	2014 Rainfall	2014 Departure from Normal
Jackson (KJAN)	6.43	+2.31	38.03	+9.80
Meridian (KMEI)	2.54	-1.86	34.26	+4.43
Greenville (KGLH)	6.37	+2.33	30.50	+2.20
Greenwood (KGWO)	9.03	+4.72	32.15	+4.51
Hattiesburg (KHBG)	4.94	-0.56	33.42	+1.38
Vicksburg (KTVR)	6.55	+2.56	34.88	+5.59

Total Flood Warning products issued: 4
Total Flood Statement products issued: 36

Total Flood Advisories MS River: 0

Daily Climate and Ag WX Products (AGO'S) issued: 30 Daily CoCoRaHS Rainfall Products (LCO'S) issued: 30 Daily River and Lake Summary Products (RVD'S) issued: 30

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&

Anna Weber

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Note: Provisional stage and precipitation data were furnished with the cooperation of the Mississippi, Louisiana, and Arkansas National Weather Service Cooperative Observer Programs, United States Geological Survey (USGS), United States Army Corps of Engineers (USACE), Pearl River Valley Water Supply District (PRVWSD), Pat Harrison Waterway District, Pearl River Basin Development District, and the Mississippi Department of Environmental Quality.

cc: USGS Little Rock District

**USGS** Ruston District

**USACE Mobile District** 

**USACE Vicksburg District** 

USACE Mississippi Valley Division

**USGS** Mississippi District

SRH Climate, Weather and Water Division

Lower Mississippi River Forecast Center

Pearl River Valley Water Supply District

**Hydrologic Information Center** 

Southern Region Climate Center

Pat Harrison Waterway District

Pearl River Basin Development District